CLAIMS

1. Bioinsecticide formulation based on entomotoxines obtained from *Bacillus thuringiensis var israelensis* with toxical activity against Dipteral insects characterized by to be dispensed as dry powder with a toxical activity between 500-1500 ITU (International Toxical Units)/mg dry powder, besides having addictives as chemical dryers, dispersing, agglutinant/humectant agents and protectors against sunlight, which become easy the permanence of active component in the application area for at least 10 days, maintaining stable its toxical activity for at least 6 months, with no harm to the ecosystem.

2. Bioinsecticide formulation according to claim 1 wherein the Bti entomotoxine is under an impure form as toxical biomass or Bti spores.

3. Bioinsecticide formulation according to claim 1 wherein the Bti entomotoxine is under an isolated form as toxical biomass or Bti spores.

4. Bioinsecticide formulation according to claim 1 wherein the chemical dryers have been selected among diatomaceous earth, calcite, clay, silica, kaolin, diatomite, bentonite, dolomite, calcium phosphate, leucite, montmobilonite, and calcinated silica.

5. Bioinsecticide formulation according to claim 4 wherein the chemical dryers are 0.1-10% w/w diatomite, 0.1-10% w/w bentonite, 0.1-10% w/w calcium phosphate and 0.1-10% w/w calcinated silica.

6. Bioinsecticide formulation according to claim 1 wherein the dispersing agents have been selected from

calcium and ammonium alginate, sodium alginate, lactose, carboxymethylcellulose, methylcellulose, celluloses and bentonite.

7. Bioinsecticide formulation according to claim 6 wherein the dispersing agent has been the methylcellulose, in 0.1-10% w/w.

8. Bioinsecticide formulation according to claim 1 wherein the agglutinant/humectant agents have been selected among sodium laurylsulfate, monoleate of polyoxyethylenes sorbitans and polyoxyethylenes stearates.

9. Bioinsecticide formulation according to claim 8 wherein the polyoxyethylenes stearates are present in a range of 0.1-10% w/w.

10. Bioinsecticide formulation based on entomotoxines from *Bacillus thuringiensis var israelensis* with toxical activities against Dipteral insects, characterized to be dispensed as tablets with 5 to 25% composition of claim 1 and neutralizing, diluent and lubricant agents.

11. Bioinsecticide formulation according to claim 10 wherein the neutralizing and diluent agents have been selected among sodium bicarbonate, apatite, granulated mannitol, micronized cellulose or other celluloses, monohydrated lactose, kaolin, leucite and talc.

12. Bioinsecticide formulation according to claim 11 wherein the neutralizing agent is sodium bicarbonate in a range of 10-70% w/w and the diluent agents are micronized cellulose and mono-hydrated lactose, both in a range of 10-70% w/w.

13. Bioinsecticide formulation according to claim 10 wherein the lubrificant agent is polyethylene glycol 6000 in a range of 1-5% w/w.

14. Preparation procedure of a bioinsecticide formulation with toxical activity against Dipteral insects characterized by the following phases:

I. Development of *Bacillus thuringiensis var israelensis* by means of fermentation in a suitable growth medium, where the not spent metabolites/nutrients are not harmful to the environment and they may be used in a industrial scale.

II. The recovery of toxical biomass, or its spores, or only entomotoxines gotten in the phase (I) by means of a suitable process of recuperation, able to keep the toxical activity of entomotoxines (pure or not).

III. Sequential addition of chemical dryers, and other addictives to the toxical biomass, or to the spores, or only to the entomotoxines recovered as mentioned in phase (II). Occasionally, the accomplishment of a dehidratation phase between joining the chemical dryers and the others addictives.

IV. Dehidratation of the blend gotten in phase (III), by means of process able to keep the toxical activity of entomotoxines, pure or not, in order to obtain a formulation dispensed as dry powder.

V. Optional addition of addictives, as diluents, lubricants, and neutralizing agents to the dry powder gotten in the phase (IV), in order to obtain the tablets.

15. Process according to claim 14 wherein the fermentation medium include:

I. Nitrogen survey: one or more substances selected from the group consisting of industrial remains riches in proteins, soya protein. urea, extract of yeast.

II. Carbon survey: one or more substances selected from the group consisting of mannitol, dextrose and sucrose.

III. Micronutrients survey: blend of salts enclosing $MgSO_4$, $MnSO_4$, $FeSO_4$ and $CaCl_2$.

IV. Sodium chloride, employed to keep cellular viability.

16. Process according to claim 15 wherein the fermentation medium components comprehend 1,5 - 3,0% w/w of amino-fertile, 1,0 - 1,5% w/w of soya protein, 0,1 - 0,2% w/w of urea, 0,6 - 0,8% w/w of mannitol, 0,1 - 0,2% w/w of sodium chloride and 0,05 - 0,08% w/w of a blend of salts constituted by 65,1% w/w of $MgSO_4$, 4,4 % w/w of $MnSO_4$, 4,4 % w/w of $ZnSO_4$, 4,4 % w/w of $FeSO_4$ and 21,7% w/w of $CaCl_2$.

17. Process according to claim 14 wherein the recovery of toxical biomass has been carried out by bioseparation with membrane vortex.

18. Process according to claim 14 wherein the others addictives are dispersing, agglutinant/humectant agents, and protectors against sunlight.

19. Process according to claim 14 wherein the dehydratation phase has been accomplished between the stages of addition of chemical dryers and the other addictives.

20. Process according to claim 14 wherein the dehydratation has been carried out in a stove under 30° C.

21. Process according to claim 14 wherein the tablets have been obtained by rotactive compression.

22. Process according to claim 18 wherein the addiction of protectors against sunlight has been carried out by means of a simple blend, or by a treatment of coating type.